AST4700 *Multi-Feature*

Stainless Steel Media Isolated Pressure Sensor

Overview

The AST4700 is a competitively priced, high quality stainless steel media isolated pressure sensor intended for the use of measurement of liquids and gases. Utilizing Krystal Bond™ Technology. Offering a one piece stainless steel sensing element the AST4700 is free of welds, internal o-rings, and oil fill. This translates into rugged construction, high cycle life, wide range of media compatibility, along with all of the benefits of MEMs technology. The AST4700 can be packaged with a variety of process connections including NPT, SAE(UNF), and BSP. Voltage, current and frequency output signals are all standard choices when selecting this product. Electrical connection options include cable, Hirschmann, and Bendix.

Benefits

- High Strength Stainless Steel Construction
- Pressure Ranges up to 10,000 PSI
- Wide Range of Configurations
- Suitable for High Shock and Vibration
- CE EN61326 Certified

Applications

- Test Stands & Lab Equipment
- Data Loggers
- Pressure Instrumentation
- Hydraulic Systems
- HVAC/R Systems
- Water Management

Performance @ 25°C (77°F)

Accuracy*	< ±0.5% BFSL (0.25% and 0.1% optional - some configurations)
Stability (1 year)	±0.25% FS, typical
Over range Protection	2X Rated Pressure
Burst Pressure	5X Rated Pressure
Pressure Cycles	> 100 Million

* Accuracy includes non-linearity, hysteresis & non-repeatability

Environmental Data

Temperature	
Operating	-40 to 85°C (-40 to 185°F)
Storage	-40 to 125°C (-40 to 250°F)
Thermal Limits	
Compensated Range	0 to 55°C (30 to 130°F)
TC Zero	<±1.5% of FS
TC Span	<±1.5% of FS
Other	
Shock	100G, 11 msec, 1/2 sine
Vibration	20G peak, 20 to 2400 Hz.
EMI/RFI Protection:	Yes
Rating:	IP-66

Electrical Data

Output	**0-5V (3 or 4 Wire)**	**0-10V (3 or 4 wire)**	**Frequency (1-6KHz)**
Excitation	10-28VDC	15-28VDC	10-28VDC
Output Impedance	<100 Ohms, Nominal	<100 Ohms, Nominal	10K pull-up
Current Consumption:	<10mA	<10mA	<15mA
Bandwidth	(-3dB): DC to 1kHz	(-3dB): DC to 1kHz	(-3dB): DC to 250 Hz
Output Noise:	<2mV RMS	<2mV RMS	<2mV RMS
Zero Offset:	<±1% of FS	<±1% of FS	<±1% of FS
Span Tolerance:	<±1.5% of FS	<±1.5% of FS	<±1.5% of FS
Output Load:	10k Ohms, min	10k Ohms, min	10k Ohms, min
Reverse Polarity Protection	Yes	Yes	Yes

American Sensor Technologies · 450 Clark Dr., Mt. Olive, NJ 07828 · phone (973) 448-1901 · fax (973) 448-1905 · email: *info@astsensors.com*

Ordering Information

AST4700	A	00100	P	5	A	1	000

Series Type

Process Connection
A= 1/4" NPT Male
B= 1/8" NPT Male*
C= 1/4" BSP Male
F= 7/16" - 20 UNF Male*

Pressure Range
Insert 5-digit pressure range code

Pressure Unit
B= BAR
K= kg/cm2
P= PSI

Outputs
2= 0-5V (3-Wire) K= 0-5V (4-Wire)
5= 0-10V (3-Wire) L= 0-10V (4-Wire)
H= 1-6kHz

Electrical+
A= 2 ft. D= 10 ft. I= DIN 43650A
B= 4 ft. E= Mini DIN 43650C R= Bendix 6 Pin
C= 6 ft.

Wetted Material
0= 17-4PH
1= 316L

Options
000= No Special Options

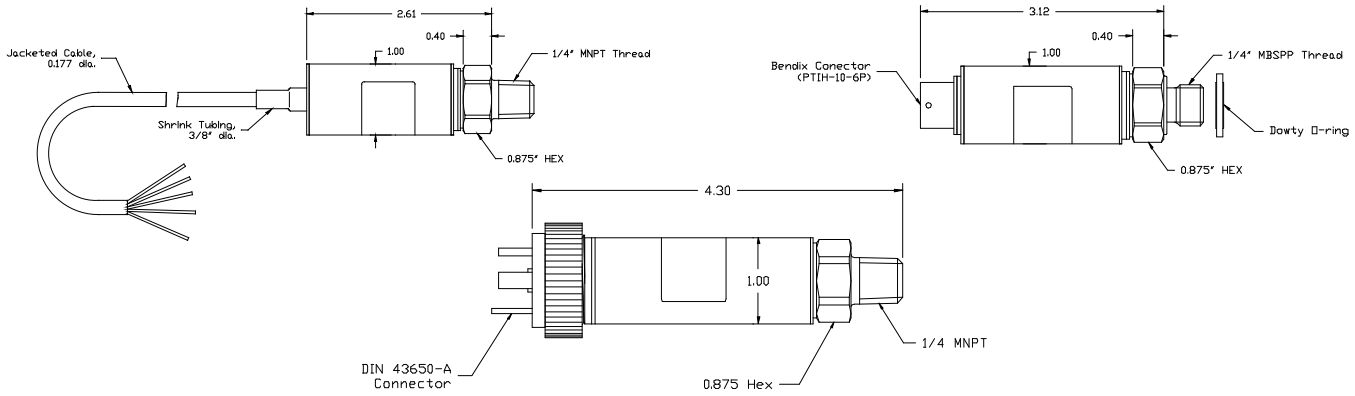
+ Wiring information available at: http://www.astsensors.com/mediacenter.php
* Not available under 50PSI (1/8" NPT Male not available in 316L)

Pressure Ranges*

PSIG Measurement Range	Pressure Range Code	BARG Measurement Range	Pressure Range Code
-14.7 to 25**	V0025**	-1 to 2**	V0002**
0-25	00025	0-2	00002
0-50	00050	0-5	00005
0-100	00100	0-7	00007
0-200	00200	0-10	00010
0-500	00500	0-20	00020
0-1,000	01000	0-35	00035
0-2,500	02500	0-50	00050
0-5,000	05000	0-70	00070
0-7,500	07500	0-100	00100
0-10,000	10000	0-250	00250
		0-350	00350
		0-500	00500
		0-700	00700

*Typical ranges. All ranges between 0-25 PSI and 0-10,000 PSI available. **Compound ranges up to -14.7 to 500 PSI available. Please consult factory.

Dimensional Data



Warranty

Workmanship - AST, Inc. pressure transmitters have a limited one-year warranty to the original purchaser. AST, Inc. will replace or repair, free of charge, any defective transmitter. This warranty does not apply to any units that have been modified; misused, neglected or installed where the application exceeds published ratings. AST's sensors are made with pride in New Jersey, USA. If in the area please feel free to stop by for a visit!

Installation/Applications - The purchaser is responsible for media compatibility, functional adequacy, and correct installation of the transmitter.